

REMARKS

Initially, in the Office Action dated May 7, 2004, the Examiner objects to the specification. Claims 1-6 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,134,559 (Brumme et al.). Claims 1-6 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,361,349 (Sugita et al.).

By the present response, Applicants have canceled claims 2-4 and amended claims 1, 5 and 7 to further clarify the invention. Applicants have submitted new claim 7 for consideration by the Examiner and submit that this claim does not contain any prohibited new matter. Claims 1, 5 and 7 remain pending in the present application.

Incorporation by Reference Comment

The Examiner has required Applicant to amend the disclosure to include material incorporated by reference. Applicants fail to understand this requirement since Applicants have not incorporated any essential material by reference in Applicants' specification. Applicants have made reference to foreign documents and their associated problems in Applicants' Background of the Invention. There has been no incorporation of essential material in the specification by reference to a foreign application or patent in Applicants' specification.

35 U.S.C. §102 Rejections

Claims 1-6 have been rejected under 35 U.S.C. §102(b) as being anticipated by Brumme et al. Applicants have canceled claims 2-4 and 6. Applicants respectfully traverse these rejections as to the remaining pending claims.

Brumme et al. discloses a uniform object model that integrates objects defined by foreign type systems into a single integrated object oriented system. The type system for the integrated object oriented system supports a super set of features from foreign object systems. The uniform object model approach converts foreign objects into uniform object model objects defined by the integrated type system and layers onto the uniform object model objects additional members supported by the integrated type system. Adapters integrate foreign objects and data sources into the integrated object oriented system by implementing foreign objects as full-fledged objects of the system.

Regarding claims 1, 5 and 7, Applicants submit that Brumme et al. does not disclose or suggest the limitations in the combination of each of these claims of, inter alia, an object integrated management system including a repository that stores adapter objects meta models defining adapter objects, or that stores virtual objects respectively created correspondingly to real data, each of which exists in different data management systems, or a first relation being defined between the adapter object and a corresponding set of the virtual objects and a second relation being defined between the adapter object meta model and the corresponding virtual object meta model. Brumme et al. discloses a data source adapter that is an adapter used for connecting clients to data sources, storing meta data and functioning as object access mechanism (see col. 4, line 54 - col. 5, line 2). The data source adapter receives data access requests from client, creates an instance from the specified meta data, and populates the instance with data from the data source for delivering the data to the client (see col. 5, lines 3-7). According to Brumme et al., a data

source adapter is provided for each data management system (see Fig. 3). At best, Brumme et al.'s meta data may correspond to the virtual object meta model in the present invention and Brumme et al.'s object access mechanisms may correspond to a part of the adapter object in the present invention. However, Brumme et al. does not disclose or suggest in the data source adapter a metamodel corresponding to the adapter object model, as recited in the claims of the present application. According to the present invention, the adapter object metamodel has a class. In contrast, Brumme et al. discloses a data source adapter that has no class of its own except the class possessed by the metadata. Therefore, Brumme et al. does not disclose or suggest a metamodel corresponding to the adapter object metamodel, as recited in the claims of the present application. Brumme et al. does not disclose or suggest an adapter object metamodel defining adapter objects. Moreover, Brumme et al. does not disclose or suggest a second relation being defined between the adapter object metamodel and the corresponding virtual object metamodel, as recited in the claims of the present application.

Accordingly, Applicants submit that Brumme et al. does not disclose or suggest the limitations in the combination of each of claims 1, 5 and 7 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claims 1-6 have been rejected under 35 U.S.C. §102(b) as being anticipated by Sugita et al. Applicants respectfully traverse these rejections as to the remaining pending claims.

Sugita et al. discloses an object management system being equipped with a single real object management system for managing a real file object such as data and a program based on a real directory object in a hierarchical structure, and also at least a single virtual object management system for managing virtual file object corresponding to the file object based upon a virtual directory object which is independent of the directory object in a hierarchical structure.

Regarding claims 1, 5 and 7, Applicants submit that Sugita et al. does not disclose or suggest the limitations in the combination of each of these claims of, inter alia, virtual object metamodels defining virtual objects, adapter object metamodels defining adapter objects, or a relation being defined between adapter object and a corresponding set of the virtual objects, or a relation being defined between the adapter object metamodel and the corresponding virtual object metamodel.

Sugita et al. is related to a real object management system that focuses its target on a single real data management system (see Abstract), not on a plurality of data management systems, as recited in the claims of the present application. Moreover, Sugita et al. discloses a virtual object that is a virtual file object and a virtual directory object. In contrast, the virtual object according to the limitations in the claims of the present application, instantiates a class. Therefore, Sugita et al. does not disclose or suggest a metamodel corresponding to the virtual object metamodel of the present invention that provides for defining a class. Sugita et al. does not disclose or suggest a virtual object metamodel or a virtual object, as recited in the limitations in the claims of the present application. Moreover, Sugita et al. does not disclose or suggest an adapter object metamodel or an adapter object as recited in the claims of

the present application. The Examiner has misinterpreted the Sugita et al. reference since the asserted correspondences between the disclosure of Sugita et al. and the limitations in the claims of the present application are all incorrect.

Accordingly, Applicants submit that Sugita et al. does not disclose or suggest the limitations in the combination of each of claims 1, 5 and 7 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

In view of the foregoing amendments and remarks, Applicants submit that claims 1, 5 and 7 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing attorney docket no. 520.40984X00).

Respectfully submitted,

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